TECHNICAL REVIEW DOCUMENT
for
OPERATING PERMIT 95OPYU060
to be issued to:

Southern Star Central Gas Pipeline, Inc.
Yuma Station
Yuma County
Source ID 1250017

Revised March 2013

Operating Permit Engineer:	Geoffrey Drissel
Operating Permit Supervisor review:	Matthew Burgett
Field Services Unit review:	Jennifer Mattox

I. Purpose

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewal operating permit proposed for this site. The original Operating Permit was issued November 1, 1997. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted July 31, 2012, previous inspection reports and various e-mail correspondence, as well as telephone conversations with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at http://www.colorado.gov/cs/Satellite/CDPHE-AP/CBON/1251596446069. This narrative is intended as an adjunct for the reviewer and has no legal standing.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

II. Source Description

This source is classified as a natural gas transmission facility defined under Standard Industrial Classification 4922. Gas is compressed to specification for transmission to sales pipelines using a single internal combustion engine powering four (4) compressor units. An emergency shutdown device is used for periodic and emergency blowdown of process lines and equipment. An emergency generator also exists on site.

The facility is located just outside of the rural town of Yuma in Yuma County, Colorado. The area is designated as attainment for all criteria pollutants. Kansas is designated as an affected state located within a 50 mile radius of the facility. There are no Federal Class I areas within 100 kilometers of the facility. Facility wide potential and actual emissions are as follows:

Pollutant	Potential to Emit (tpy)	5/10 – 4/11 Actual Emissions (tpy)
NOx	239.9	185.9
VOC	13.1	10.4
CO	26.1	20.2

This source is considered to be a minor stationary source in an attainment area for purposes of Prevention of Significant Deterioration (PSD) regulations. Any future modification to this facility that is major by itself (Potential to Emit of $\geq$ 250 TPY) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment may result in the application of the PSD review requirements.

Potential emissions are taken from the existing Operating Permit for this facility. Actual emissions are taken from the 12 month rolling emission totals reported during a facility inspection on January 20, 2012 for the time period May 2010 through April 2011. The Division assumes that emissions from the facility have remained the same or decreased from the levels listed.

MACT Applicability

HH –Oil and Natural Gas Production Facilities:
The Yuma Station is not an oil and natural gas production facility as described in 40 CFR Part 63 Subpart HH, “National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities” (Oil and Natural Gas Production MACT), and thus is not subject to this MACT.

HHH – Natural Gas Transmission and Storage Facilities:
The Yuma Station is not a major source of hazardous air pollutants as described in 40 CFR Part 63 Subpart HHH, “National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities”, and thus is not

subject to this MACT.

ZZZZ – Stationary Reciprocating Internal Combustion Engines:
Under the rules for reciprocating internal combustion engines, for production field facilities, only emissions from glycol dehydrators, storage vessels with the potential for flash emissions, reciprocating internal combustion engines and combustion turbines need to be aggregated to determine if the facility is a major source for HAPS. Total HAP emissions for this facility, based on permitted production, have been calculated to be less than major source levels. MACT ZZZZ requirements for engines at major sources of HAPs therefore do not apply.

MACT ZZZZ includes requirements for engines located at area sources of HAPs. Based on manufacturing date and commencement of operation date, MACT ZZZZ requirements apply to the emergency generator engine at this facility. This engine is considered existing and must comply with the requirements set forth in ZZZZ. MACT ZZZZ requirements also apply to the compressor engine at this facility. This engine is considered existing and must comply with the requirements set forth in ZZZZ. These engines are subject to the work practice standards found in MACT ZZZZ Table 2d, which include routine replacement of oil and filters, and inspection of spark plugs, hoses and belts.

NSPS Applicability

KKK - Onshore Natural Gas Processing Plants

NSPS KKK describes requirements for limiting emissions of fugitive VOC's from onshore natural gas processing plants. The Yuma Station does not meet the definition of an onshore gas processing plant and thus is not subject to this NSPS Subpart.

JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

NSPS JJJJ includes requirements for spark ignition internal combustion engines that commenced construction (i.e., ordered by the owner or operator) after June 12, 2006 and manufactured on or after July 1, 2007 (40 CFR §60.4230(4)) or commenced modification or reconstruction after June 12, 2006 (40 CFR §60.4230(5)). Based on construction and manufacturing dates, NSPS JJJJ requirements do not apply to any of the engines at the Yuma site.

OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

EPA published the final Subpart OOOO rule in the Federal Register on August 16, 2012. EPA also published proposed changes to Subpart OOOO on April 12, 2013. The proposed updates would only affect certain storage tanks.

At production field facilities, Subpart OOOO applies to reciprocating and centrifugal compressors, pneumatic controllers and storage vessels that were constructed, modified or reconstructed after August 23, 2011. All of the compressors and tanks at Yuma were constructed prior to this date.

Subpart OOOO excludes natural gas transmission in the regulation of pneumatic controller, as stated in §60.5365(a)-(g). Based on this facility's status as a natural gas transmission facility and its negligible condensate storage tank emissions, Subpart OOOO requirements do not apply to the Yuma station.

Reg 7 Applicability

Section XVII.C - Section XVII.C requires owner/operators of atmospheric condensate storage tanks at oil and gas exploration and production operations, natural gas compressor stations, natural gas drip stations and natural gas processing plants to install air pollution control equipment capable of reducing emissions by at least 95% on tanks with actual uncontrolled emissions of 20 tons per year (tpy) VOC or greater by May 1, 2008. An atmospheric condensate storage tank located at Yuma, listed as an insignificant activity, has actual uncontrolled emissions less than 20 tons per year and the facility is, therefore, not subject to Regulation No. 7, Section XVII.C.

Section XVII.D - Section XVII.D applies statewide and requires that glycol dehydrators at natural gas compressor stations with actual uncontrolled emissions equal to or greater than 15 tons of VOC per year install air pollution control equipment to reduce those emissions by at least 90 percent. There are no dehydrators at Yuma and this requirement does not apply to this facility.

Section XVII.E.2.b - Section XVII.E.2 applies statewide to engines that commenced construction or relocation into Colorado after July 1, 2007. The engines at this facility were constructed before this date and are, therefore, not subject to this section of Regulation No. 7.

Section XVII.E.3 - Section XVII.E.3.a applies statewide and requires all existing natural gas-fired rich burn engines with manufacturer's nameplate design rating greater than 500 hp to install and operate emission controls by July 1, 2010. The emergency engine at this facility has a design rating less than 500 hp and is, therefore, not subject to this section of Regulation No. 7.

Section XVII.E.3 b also allowed owners/operators of natural gas fired RICE with a

manufacturer's nameplate design rating of greater than 500 hp constructed or modified on or before February 1, 2009, to avoid the installation of controls if it could be demonstrated that the cost of retrofitting those controls would exceed $5,000/ton of VOC controlled. To qualify for this exclusion, it was necessary to provide the demonstration of retrofit costs to the Division by August 1, 2009. Southern Star was required to submit documentation for the engine covered by point 001 at Yuma by August 1, 2009, or control the engine with an oxidation catalyst no later than July 10, 2010. Although Southern Star failed to provide the retrofit cost analysis by August 1, 2009, Southern Star did provide an analysis to the Division on January 14, 2010. The analysis demonstrated the retrofit costs exceeded $5,000 per ton of VOC, exempting the engines from the control requirements. The Division approved the exemption request on May 24, 2010 and entered into an Early Settlement Agreement with Southern Star on May 25, 2010. As a result, this engine is considered to be in compliance with the requirements of this section of Regulation No. 7.

Compliance Assurance Monitoring

Emissions from the engines at this facility are not controlled with a pollution control device. Therefore, CAM does not apply to these units.

Source Determination

With this permit action, the Division revisited the source determination in regards to the natural gas operations in the area surrounding the Yuma facility to verify that the proper pollutant emitting activities are included in this permit as part of the Yuma Compressor Station. Southern Star did not identify any other pollutant emitting activities in the vicinity of the Yuma facility that are dependent upon the Yuma Compressor Station to maintain operations. The Division considers the current determination for this facility to be accurate, and the proper pollutant emitting activities are included in this permit.

Routine Maintenance Emissions

The Division has established a policy of requiring APENs and possibly permits for VOC emissions resulting from periodic routine maintenance and blowdown activities if those emissions are predicted to exceed APEN/permit de minimis levels. The Division has determined that these activities at the Yuma facility will not exceed the de minimis levels and emissions resulting from routine maintenance and blowdown activities have not been incorporated into this permit.

III. Discussion of Modifications Made

Source Requested Modifications

The source did not request any changes to the permit in their renewal application. The source did recognize the applicability of new MACT ZZZZ requirements to Unit E001 and the emergency generator and included a summary of those applicable requirements in the renewal application.

Other Modifications

Although the source did not request any changes to their permit in their renewal application, the Division has included changes to make the permit more consistent with recently issued permits, including comments made by EPA on other Operating Permits, as well as to correct errors or omissions identified during review of this renewal. These changes are as follows:

Page following Cover Page

The facility site location was revised to reflect the most current information.

Section I - General Activities and Summary

The language in Condition 1.4 was changed to include General Conditions 3g (last paragraph) on the list of State-only enforceable conditions.

The emergency generator was added to the emission unit summary table in Condition 6.1.

Section II - Specific Permit Terms

The following changes were made to the specific requirements of Section II:

- The appropriate MACT ZZZZ requirements that apply, or will apply, to Unit E001 have been added to Section II of the Operating Permit.
- The Waukesha engine that was previously designated as an insignificant activity has been listed as a separate emission unit as a result of the incorporation of applicable requirements into NESHAP Subpart ZZZZ for engines located at area sources of HAPs. This engine is considered an existing engine and the appropriate MACT ZZZZ requirements have been added to Section II of the Operating Permit.
- The portable monitoring language was revised to reflect the current version.

Section IV - General Conditions

- The General Conditions were updated to reflect the most current version.

Appendices

- The emergency generator engine was added to Appendix B and C.
- The Division contact in Appendix D was corrected.

IV. Greenhouse Gasses

The potential-to-emit of greenhouse gas (GHG) emissions from this facility is less than 100,000 TPY CO2e. Future modifications greater than 100,000 TPY CO2e may be subject to regulation (Regulation No. 3, Part A, I.B.44).